(11) Publication number:

11135794 A

Generated Document.

PATENT ABSTRACTS OF JAPAN

(21) Application number: 09295748

(51) Intl. Cl.: H01L 29/786 H01L 21/336

(22) Application date: 28.10.97

(30) Priority:

(43) Date of application

21.05.99

publication:

(84) Designated contracting states:

(71) Applicant: NEC CORP

(72) Inventor: KOBAYASHI KIYONARI

(74) Representative:

(54) SEMICONDUCTOR DEVICE AND ITS MANUFACTURE

(57) Abstract:

PROBLEM TO BE SOLVED: To make the breakdown strength and the on-resistance of a pair of transistors equal in a semiconductor device of a CMOS structure, in which a pair of offset-type first conductivity-type and second conductivity-type transistors are formed on one first conductivity-type substrate.

SOLUTION: A second conductivitytype transistor 102 is formed to be of an LMOS structure, and a first conductivity-type transistor 101 is formed to be of an LDMOS structure. Thereby, a drain-base layer 125, whose function is identical to that of a drain offset diffused layer 126, is formed in the position of a substrate 5 separately from a source-base diffused layer 114 in the first conductivity-type transistor 101. The first conductivity-type transistor has a structure, whose breakdown strength is stable and whose ONresistance is high, in the same manner as the second conductivitytype transistor 102.

COPYRIGHT: (C)1999,JPO

